Approved For Release 2001/07/12 : CIA-RDP78T05439A000400060070-8

### The country on so must

#### **DECLASS REVIEW BY NIMA / DoD**

TCS No. 7985/64
IB No. 343/64
24 August 1964
Copy No. \_/\_\_\_

MEMORANDUM FOR: Chief, Programs Division, ORR

25X1A ATTENTION

THROUGH : Chief, Requirements Branch, Reconnaissance Group, CGS

FROM : Chief, CLA/PID (NPIC)

SUBJECT : Abu Zabal Military Factory No. 18

REFERENCES: (1) ORR Requirement No. C-RR4-81,116 (Revised)

(2) CIA/PID Project No. C 471/64

l. In response to the above referenced requirement, a chronological photo-study was made of the munitions factory near the town of Abu\_Zabal, Egypt, which is known as Abu\_Zabal Military Factory #18. The geographic coordinates of this installation are 300 15'N - 310 24'E and it is located approximately 17 statute miles NNE of the center of Cairo. The facility is served by both road and rail and in addition has a canal system within three statute miles.

25X1D 2. The study covers a period extending from 25X1D Since the factory was basically completed by early and since 25X1D scale and quality of photography was good, the annotations appear on an overlay to CIA/PID/IB-P-1203/64, instead of the more recent coverage. There are two overlays attached to this photograph (Figure 5), one describing features of the plant and the other showing the observable portion of the pipe line system.

25X1D 3. (Figure 2), shows the factory at its time of maximum construction activity. At this stage the plant was obviously not in production. The rail spur bed was not completed, and of the major structures, only the warehousing and personnel housing area appear near completion. The various construction sites are annotated.

25X1D 4. (Figure 3), shows that all construction started three years previously has been completed. In addition, vegetation is growing under irrigation, probably for a dual purpose; (a) to reduce wind erosion, and (b) to minimize missile damage in the event of an accidental explosion. This photography also shows the heavy security around the site with a high wall, double fencing, and numerous guard towers.

Ter carried compo nort

HANDLE VIA
TALENT-KEYHOLE
CONTROL INSTEM ONLY

25X1D

HANDLE VIA
TALENT-KEYHOLE
CONTROL SYSTEM ONLY

TCS No. 7985/64 Page 2

SUBJECT: Abu Zabal Military Factory No. 18

25X1D

5.
underway. A large secured storage area is nearly completed approximately
3,000' southeast of the main compound. At the same time, revetted construction
is taking place on the southeast side of the complex, just within the wall.
It is probable at this time production has begun in the finished portion of
the factory, since it appears a burn area has been established adjacent
to the plant. This is the fan shaped area just above the new construction.
A burn area is needed only by a producing facility for waste disposal.

- 25X1D 6. The photo from Factory #18 essentially as it is today. All major construction is completed, steam lines are in, the road serving the storage area is paved, and the spur rail line is extended to the main line.
  - a. It is reported that Factory #18 manufactures nitrocellulose, nitroglycerine, and TNT. The evidence available from photography tends to confirm these reports, however, it was not possible to identify with certainty the process flow for any of these products.
  - b. The warehouse area and the water treatment facility are typical of nitrocellulose operations. The large warehouse would be used to store raw cotton with the smaller structures serving a drying purpose. The water facility is required for washing purposes with the thickner being used for cotton recovery. Beyond the water treating area, it was not possible to pick out nitrocellulose flow. The area annotated No. 16 on the overlay to Figure 5 contains interconnected buildings of a type which could be used for nitrating, boiling, and poaching but there is not enough evidence to flatly state their function.
  - c. The group of buildings numbered 11 on the overlay probably is the TNT manufacturing area. The number and location of buildings, and the connecting pipe lines probably indicate nitrating operations and acid fortifying, required in TNT manufacture.
  - d. A heavily revetted building with other lesser revetted structures, annotated No. 9, is a possible nitroglycerine facility. The nitration would take place in the most heavily revetted structure, with washing and stabilizing operations being done in the less secured buildings.
  - e. If nitrecellulose and nitroglycerine are being manufactured at this site, it is probable that double base propellants are also manufactured here. The two structures annotated No. 12 are process buildings rather than storage type and could be used in mixing these propellants.

The count onces north

HANDLE VIA
TALENT-KEYHOLE
COMMONLY

TALENT-KEYHOLE

CONTROL SYSTEM ONLY

## IOP STORE COLD BUT

TCS No. 7985/64 Page 3

SUBJECT: Abu Zabal Military Factory No. 18

f. The steam plant, annotation No. 8, has several tall columns on the south side of the building. Shadow and poor scale did not permit positive identification, but they are similar to absorbtion towers used in acid manufacture. There are also vertical tanks, adjacent to the building, which could be used for acid storage.

25X1D 7. the only good 25X1D coverage, does not show the complete factory. The portions which are 25X1D visible show no change since

The next available clear photography is a KEYHOLE (Figure 7). Analysis of this photography shows no major 25X1D 25X1D 25X1D changes since within the munitions factory; however, major construction is taking place immediately adjacent on the northeast. Careful examination of this new industrial facility by several members of the Industrial Branch, PID, failed to produce evidence of its ultimate purpose. It is heavily secured by a high wall and numerous guard towers. Twenty major and several lesser buildings are under construction with the design of the buildings being mostly tall, long and narrow. A group of 15 to 20 horizontal pressure-type tanks were observed on later photography. Steam lines connect most of the buildings. There is no direct physical connection of any type between the new site and the munitions factory. The steam, the horizontal tanks, and the long narrow buildings are typical of nitration operations but this cannot be confirmed. The closeness of the buildings and the lack of barriers indicates the plant will not deal with hazardous materials. Until further photography and information become available the site must be classed as unidentified.

9. Measurements of all major buildings at Abu Zabal Military Factory #18 were made by TID/NPIC. The results of these measurements are set forth in tables keyed to the line drawings attached to this memorandum. The factory was divided into three sections for purposes of measurement, as illustrated.

#### 10. REFERENCES:

MAP: WAC 447 ATC 447-12

25X1D

VIA
TALENT-KEYHOLE

MANDLE VIA TALENT-KEYHOLE CANTROL SYSTEM ONLY

TCS No. 7985/64 Page 4

SUBJECT: Abu Zabal Military Factory No. 18

11. The analyst assigned to this project was may be contacted on extension 2607 should any questions arise concerning this project. This requirement is considered complete with the issuance of this memorandum.

25X1A

#### ENCLOSURES:

- 9 Annotated Photos (CIA/PID/IB-P-
- 2 Overlays (CIA/PID/IB-P-1209/64 3 Line Drawings (CIA/PID/IB-P-121

HANDLE VIÃ TALENT-KEYHOLE CONTROL SYSTEM ONLY HANGLE NOT TALENDARRYHOLE CONTROL BUSIEM ONLY

illigi kanalan Nyaéta

> TCS No. 7985/64 IB No. 343/64

25X1D

25X1D

# MEASUREMENT TABLE -ABU ZABAL AMMUNITION FACTORY Keyed to

### ADMINISTRATION AND HOUSING-AREA KEYED TO FIGURE 10

BUILDING NO.	DIMENSIONS	AREA IN SQ. FT.	HEIGHT	
1				
<b>■</b> 7.				
2 3 .				
5 6				25X1D
7 .				
7 8				
9 10				
10				
11				
<b>1</b> 2				
13				
14				
<b>1</b> 5				
16				
17		1 500		
_ 18	30 x 50 approx.	1,500	30'	
19 20	30 <b>x</b> 50	1,500	30'	
- 20	30 <b>x</b> 50	1,500	30'	
_ 21	30 <b>x</b> 50	1,500 1,500	30'	
22 · 23	30 <b>x</b> 50		30 <b>'</b>	
23 24	30 <b>x</b> 50	1,500 1,500	30'	
24	30 <b>x</b> 50	1,500	30'	
25 26	30 <b>x</b> 50	1,500	30'	
26	30 <b>x</b> 50		30'	
27 28	30 <b>x</b> 50	1,500 1,500	30'	
<b>=</b> 28	30 <b>x</b> 50	1,500	30'	
29	30 <b>x</b> 50	2,500	20	
<del>-</del> 30	50 <b>x</b> 50	2,500		
31_	50 x 50	6,000		25X1D
32 33	Irregular	2,600		
	Irregular	2,000		
34	Unknown			
35 36				
3 <sup>4</sup> 35 36 37 38				25X1D
37				
<b>=</b> 38				057/45
J-	TOTAL Housing and Admi	nictration		25X1D
_	TOTAL Housing and Admi	111301301011		•

TGP (22.2) (....)

HANDLE VIA
TALERT-REYHOLE
CONTROL SYSTEM ONLY

TALE THE VIA
TALE THE KEYHOLE
CONTROL SYSTEM ONLY

### MANUFACTURING AREA - KEYED TO FIGURE 11

BUILDING NO.		DIMENSIONS	AREA IN SQ. FT.	HEIGHT	
					25X1D
1 2 3 4 5 6 7 8 9 10	25X1D	140 x 80 140 x 80 140 x 80 140 x 80 25 x 45 80 x 40	11,200 11,200 11,200 11,200 3,440 3,440 1,125 3,440	20' 20' 20' 20'	
12 13 14 15 16		O() * 4()	J <b>y</b>		25X1D
17 18 19 20 21 22		80 x 70 approx. Irregular Irregular Irregular	5,600 2,700 2,265		25X1D
23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38					25X1D
39 40		25 <b>x</b> 20	500 1,650	20'	25X1D
41 42 43 44 45		)) <b>x</b> 3∪			25X1D

HANDLE VIA
TALENT-KEYHOLE

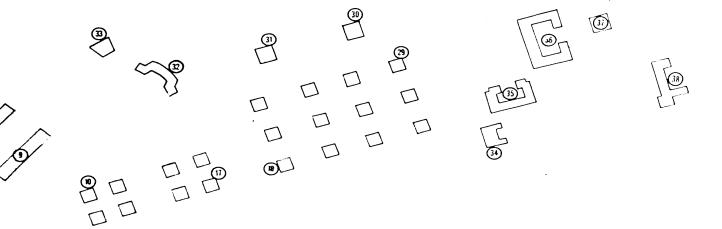
TOP CLOSEN AND STORE

### STORAGE AREA - KEYED TO FIGURE 12

BUILDING NO	DIMENSIONS	AREA IN SQ. FT.	
1 2 3 1	Irregular Irregular Irregular	4,500 4,500 4,500	
1 2 3 4 5 6 7 8 9			
10 11			25X1D
12 13 14 15			
16 17 18 19			-
20 21 22	80 <b>x</b> 25 80 <b>x</b> 25 80 <b>x</b> 25	2,000 2,000 2,000	
23 24 25 26	80 x 25 80 x 25 80 x 25 25 x 15	2,000 2,000 2,000 375	
	TOTAL Storage Area		25X1D
	TOTAL AREA OF ALL THREE ZONES Housing and Administration Manufacturing Area Storage Area	285,000 440,995	25X1D 25X1D

TOP SLUMET GHASS HUFF

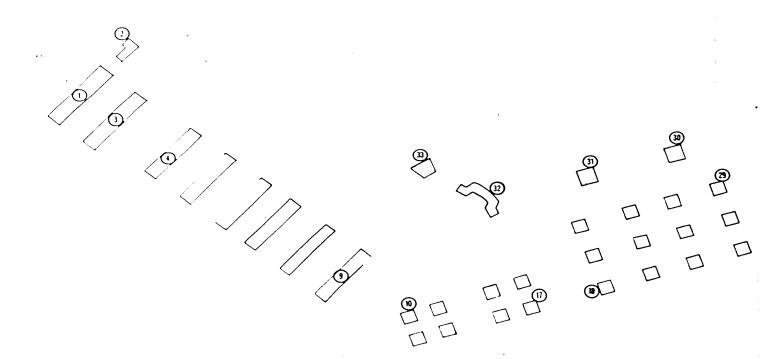
HANDLE VIA
TALENT-KEYHOLE
CONTROL SYSTEM ONLY



HOUSING AND ADMINISTRATION AREA

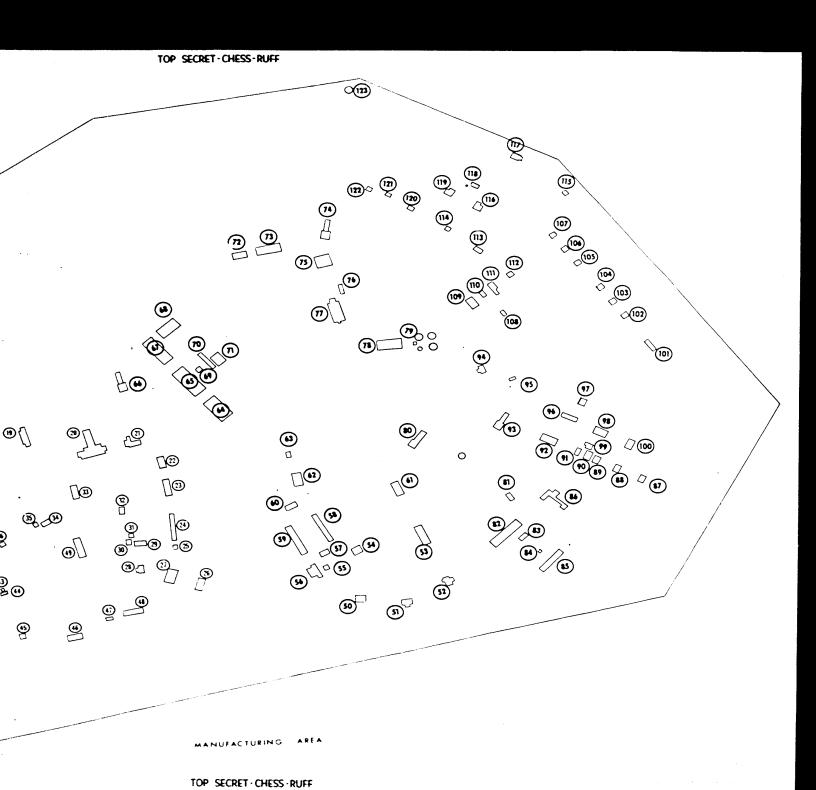
TOP SECRET- CHESS RUFF

45.755 45

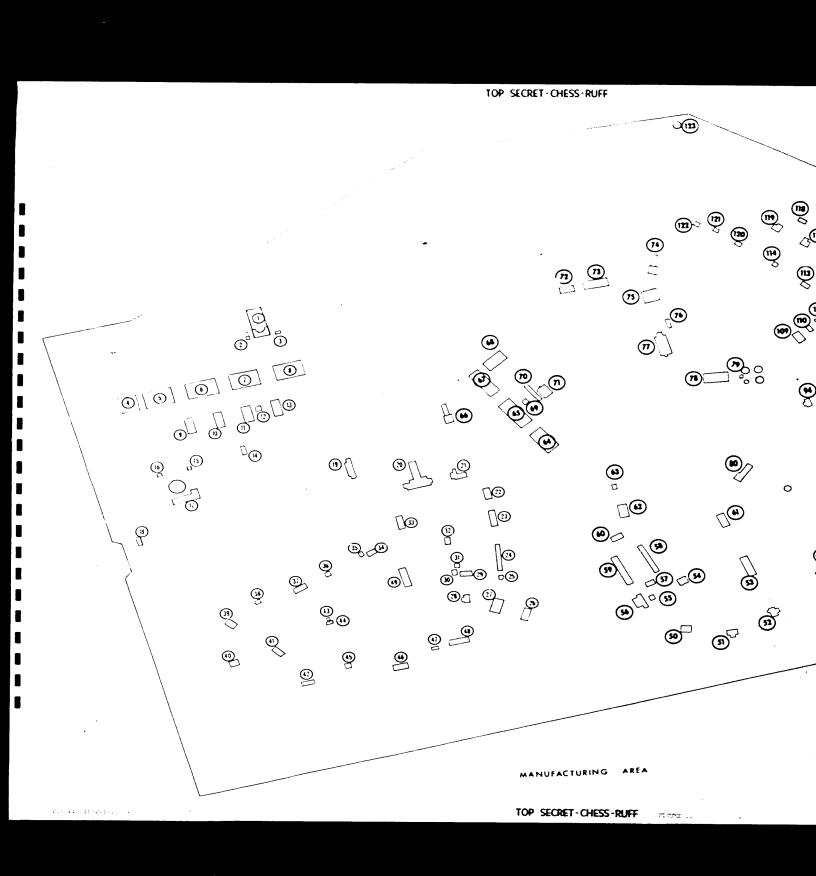


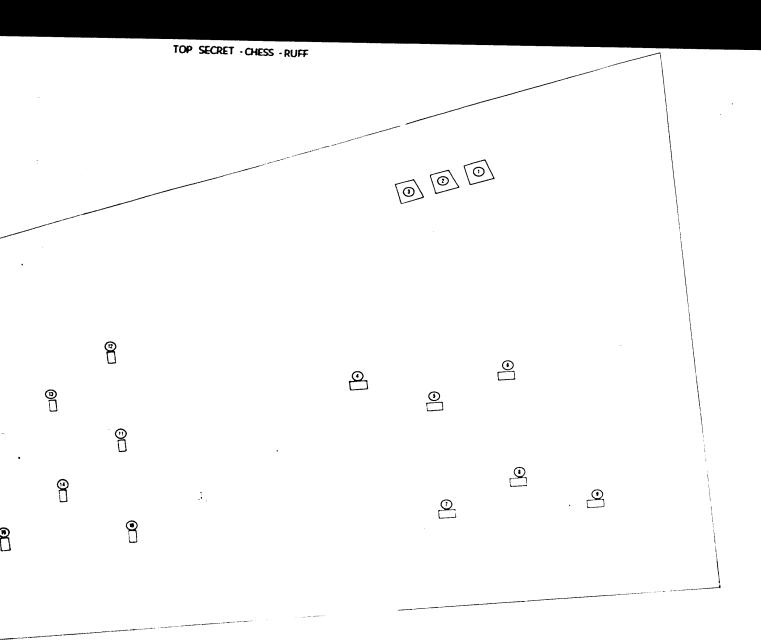
HOUSING AND ADMINISTRATION AREA

TOP SECRET- CHESS RUFF

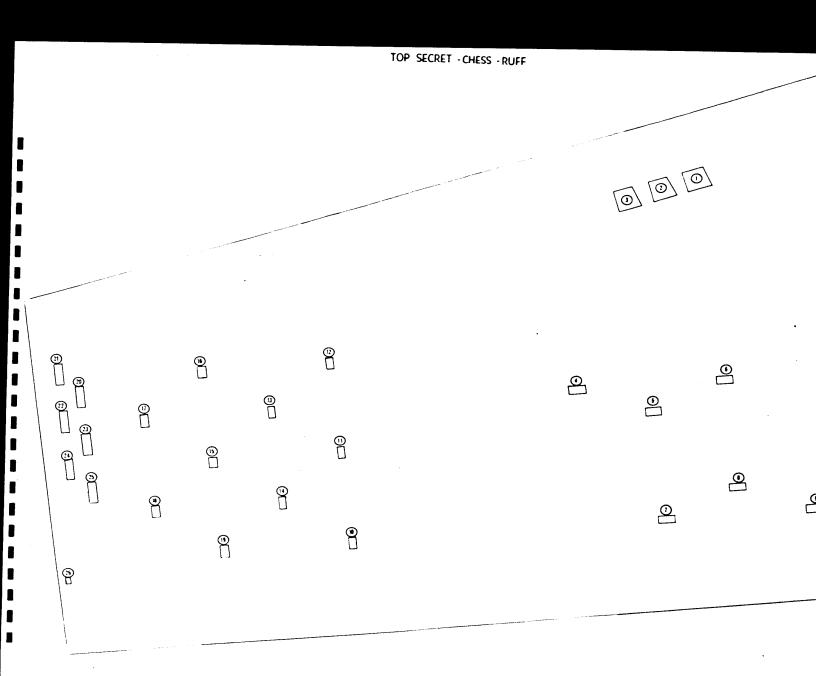


5-13 TO 3





TOP SECRET -CHESS -RUFF



STORAGE AREA
TOP SECRET -CHESS -RUFF